



ALLIANCE
Technologies Corporation

September 6, 1990

Superfund Records Center
SITE: Ciba-Geigy
BREAK: 19.00
OTHER: 638094

Kathy Castagna
Regional Project Officer
U.S. Environmental Protection Agency
Waste Management Division
JFK Federal Building, Room 2203
Boston, Massachusetts 02203

Reference: Contract No. 68-W9-0003, TES 6
Work Assignment No. R01005
Ciba-Geigy, Cranston, Rhode Island
Oversight of Responsible Party Search

Subject: Deliverable: EPA Region I Trip Report

Dear Kathy:

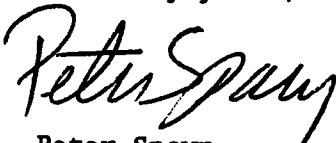
In accordance with the reporting requirements of the subject Work Assignment, enclosed is one (1) copy of the Trip Report Notes from Charles Foster's August 22, 1990 site visit to the Ciba-Geigy facility. The WAM's copy has been submitted directly. This submittal satisfies one of the deliverable requirements for this Work Assignment.

Please note this deliverable describes the following activities conducted by Mr. Foster:

- Observation of monitoring well development; and
- Conversation notes.

Questions regarding this submission should be directed to the Alliance Project Manager, Joanna Hall at (508) 970-5757 ext 5146, or me.

Sincerely yours,


Peter Spawn
Regional Manager

PS/km

Enclosure

cc: Frank Battaglia/EPA Work Assignment Manager
Jill E. Robbins/TES-6 Contracting Officer (letter only)
Jack Lewis, Jr./Alliance TES-6 Contracts Manager (letter only)
Joanna Hall/Alliance Project Manager



SEMS DocID 638094

"ENFORCEMENT CONFIDENTIAL"

EPA Region I Trip Report

Prepared by: Charles Foster, Alliance Hydrogeologist
Date: August 22, 1990
Project: RFI Field Oversight Activities Ciba Geigy Facility, Cranston, RI
(1-635-058-0-1000-0)

Description of Activity:

On August 7, 1990, Charles Foster of Alliance visited the site at the request of the EPA Work Assignment Manager, Frank Battaglia. The purpose of this site visit was to observe well development procedures being conducted by Woodward-Clyde consultants of Wayne, NJ. Bedrock well development of monitoring well number RW-1 was the focus of the day's activities. The following is a summary of the field log for this particular event:

- 0840 Met with Mark Houlday, Site Manager, of Woodward-Clyde Consultants who instructed me to sign his site-access log in the building used as their temporary office.
- 0850 Met with Dan Greenless, the Ciba Geigy Site Manager.
- 0852 Entered former production area in Level D and met with Dan Pardieck of the Ciba Geigy office in Greensboro, NC. All personnel were now at location RW-1 which was being surged with the submersible pump by Kevin Murphy of Woodward-Clyde. Kevin Murphy was wearing modified Level D protection (Tyvek suite and latex gloves).
- 0900 Kevin Murphy calibrated a LaMotte Chemical, Inc. Model 200B turbidity meter. Also, a YSI Model 33 specific conductance (SC) meter was on site for measurements of SC and temperature. Several 55-gallon drums (four) were at the well location for containerization of purged water. In addition, a HNu PI 101 meter was on site.
- 0912 I noted that a surveying crew was present on site and were measuring elevations of wells, bridges, etc.
- 0914 Mark Houlday and Kevin Murphy attached a new length of black PVC hose and the power cord to the submersible pump and connected the cord to a generator (gas operated). The water level in RW-1 was measured and noted as 8.2 feet. The pumping apparatus was lowered into the well which is 92 feet deep.
- 0925 I noted that no particular exclusion zone is marked off on this property. An intermittent fence does surround portions of it. In addition, I noted that orange painted stakes are in the ground in grids extended over the entire site. Mark Houlday pointed out that these were used for ground penetrating radar (GPR). Kevin Murphy noted that background on the HNu meter was 0.2 ppm.

- 0933 Kevin Murphy explained that pumping of the well would be engaged at 0940. Also, he pointed out that readings of temperature, specific conductance, and turbidity would be taken at 5-minute intervals. In addition, the water level would be monitored periodically with an electric tape since the well was anticipated to run dry during pumping.
- 0935 Pump engaged, initial SC = 111.5 and turbidity = 24.4 Nephelometric turbidity units (NTU). Kevin Murphy was wearing gloves and using a glass jar for the collection of samples for their respective measurements. I noted that our watches differed by 5 minutes.
- 0940 The flow from the hose was steady and the water level had dropped to 43.7 feet. The glass jar was rinsed twice prior to 2nd readings which were: SC = 117.0 and NTU = 12.3. I noted that turbidity readings fluctuated around 12.3 but the meter did not fully stabilize. Also, as water was containerized, Kevin took an HNu reading of the headspace over the drum. The reading was not above background. In addition, the conductivity probe was rinsed with DI between readings, and the tubes for turbidity readings were also rinsed.
- 0945 Water level (WL) had dropped to ~71.75 ft; readings were SC = 113.5 and NTU = 1511.
- 0950 WL = 88.5 ft; readings of SC were 113.5 and 24.3 NTUs. Well had been pumped dry and approximately 70 gallons had been purged and containerized. Kevin Murphy decided to wait until the well recovered 50% or approximately 45 feet before returning to pumping.
- 1030 While the well recharged, Mark Houlday, Dan Pandick and I went to site office to view the rock core of this hole. Generally, the weathered sandstone from this core as compared with rock cores from other coring runs was highly variable.
- 1055 I returned to RW-1 and Kevin Murphy pointed out that the well was recharging slowly. He also mentioned that the East Coast drilling crew was completing the residential area monitoring wells by cutting off excess riser pipe and protective casings.
- 1130 WL in RW-1 has reached 41 feet, pump was started. H₂O temp. = 30°C, SC = 117, NTU = 56.5. (I attributed this high turbidity reading to fresh H₂O coming through the screen containing sediment.
- 1133 WL = ~ 64.7 feet.
- 1135 Readings were SC = 260, NTU = 17.1.

- 1137 Water level measured, WL = 82.8 ft, falling steadily, fast drawdown.
- 1140 Well purged dry, readings were: SC = 230; NTU = 15.5.
- 1200 Crew took lunch during recharge of RW-1.
- 1230 Crew and I returned to RW-1 WL = 68 ft and we waited to purge at 45 ft (= 50% recovery).
- 1315 WL = 45 ft pump started, temp. = 32°C, SC = 305, NTU = 40.4
- 1320 WL = 77.9 ft, SC = 205, NTU = 7.4, Temp = 17°C.
- 1325 SC = 112, NTU = 18.1, WL = 89.0 ft - well purged until dry for the third time.
- 1326 I inquired with Kevin Murphy as to the decon which was used between wells on the submersible pump. He stated that Alconox and tapwater and a tapwater rinse were used. Also, he pointed out that dedicated hose was used for each well.
- 1335 Mark Houlday and I discussed the completion of the well development. I pointed out that according to their work plan, if the well goes dry, it will be pumped for 1 hour with recharge and pumping. Also, he inquired as to whether or not I had any problems with the work which was performed that day. We also discussed the proposed field schedule for the fall, and he stated that many activities would be performed concurrently. I explained I was not sure of Alliance's level of effort for these activities.
- 1400 Alliance Technologies offsite.

Summary:

In general, the work was performed professionally and accurately. The amount of time required (1 hour) by the work plan for the recharge and pumping for development was actually exceeded. This was essentially due to the poor recharge rate.

Alliance did not observe the decon procedure of the pumping apparatus between monitoring wells as only one well was worked on during this visit. If the solutions described by Mr. Murphy were the only rinses used, it would be a deviation from the approved procedures in Section 6.8.4 of Woodward-Clyde's RFI Work Plan:

1. Scrub with potable water to remove mud and residue.
2. Alconox scrub and bristle brush.
3. Distilled (deionized) rinse).
4. Pesticide grade hexane Rinse.

5. Distilled water rinse.
6. Foil.